Paper #33

Does a Balanced TKA Produce a More Forgotten Joint?

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Notes

Introduction: Patient reported outcome measures are increasingly recognized as important in quantifying the clinical success of TKA. One such metric is the Forgotten Joint Score, which measures the ability of a patient to forget about their joint following surgery. Two of the primary technical goals of TKA surgery are to align the components properly and balance the soft tissues as these factors are thought to contribute to the clinical success (and lack of joint awareness) following TKA. The aim of this study was to measure post-operative joint awareness in patients with and without a balanced knee following primary TKA.

Methods: Eligible patients were randomized to one of two patient groups: sensor-guided TKA or surgeon-guided TKA. Intraoperative sensors were utilized in all cases. The validated Forgotten Joint Score-12 was assessed at 6 weeks and 6 months post-operatively. For the purposes of this study, the two randomized subject groups were pooled and stratified by their state of soft-tissue balance. "Balanced" knees were defined as having a mediolateral load differential of less than 15 lbf and "unbalanced" knees were defined as having any mediolateral load differential greater than 15 lbf. 149 subjects had 6-week data and 87 subjects had 6-month data.

Results: Of the 149 patients with 6-week data, 83 were balanced and 66 were unbalanced. Of the 87 subjects with 6-month data, 51 were balanced and 36 were unbalanced. At both 6 weeks and 6 months, the balanced group of patients reported being less aware of their joint replacement compared to the unbalanced group (Balanced 6wk 33.2 +/-9.9; Unbalanced 6wk 36.2 +/-11.6; p=0.040); (Balanced 6m 20.4 +/-12.6; Unbalanced 6m 26.5 +/-13.6; p=0.021).

Conclusions: The results of this study demonstrate that patients with quantitatively balanced TKA have statistically significantly lower Forgotten Joint Scores than patients with unbalanced TKA.
